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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,966	01/28/2002	Krag C. Smith	269-101P-CIP	6702
7590	12/05/2003		EXAMINER	
WILLIAM L. KLIMA 2046-C JEFFERSON DAVIS HIGHWAY STAFFORD, VA 22554				FISCHER, JUSTIN R
		ART UNIT		PAPER NUMBER
		1733		

DATE MAILED: 12/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/055,966	SMITH ET AL.
	Examiner	Art Unit
	Justin R Fischer	1733

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 28 January 2002.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-45 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6, 10, 11, 15, 16, 20-24, 26, 27, 30-36, and 39-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Smith (US 6,298,889).

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Smith discloses a tire construction in which the tire rubber composition is of a non-black color, wherein said non-black color remains throughout the density of the tire (i.e. the entire tire rubber [100%] is non-black or “fully colored”) (Column 3, Lines 25-30).

Regarding claims 10 and 11, Smith describes the use of optical pigments (e.g. phosphorescent, fluorescent) in the tire rubber compositions, which is seen to constitute a visual or colored pattern.

With respect to claim 15, the tire of Smith “is configured” to display advertisement. It is noted that the claim as currently drafted does not require a tire having advertisement- the claim only requires that the tire is configured to display advertisement (the tire of Smith does have sidewalls to display advertisement).

Regarding claim 16, the aforementioned optical pigments are seen to constitute artwork. It is further noted that Smith suggests the use of photochromic pigments that change color in response to a change in temperature- such a composition is seen to constitute a tire provided with “artwork”.

With respect to claim 20, the entire depth (inside to outside) of the tire of Smith contains the same coloring pigment such that the tire will not change in color when a cut or other damage occurs to the surface of the tire.

Regarding claims 21-24, 26, and 42, the use of optical pigments or photochromic pigments provides a colored surface that changes color. It is noted that Smith discloses embodiments in which the color is reversible (optical or photochromic pigments). The respective pigments described by Smith change color with time/wear and temperature. Also, the optical pigments are seen to constitute a device “for lighting said tire”.

Regarding claims 27 and 35, as previously stated, the entire tire rubber composition is formed of the same color.

As to claims 30-34, the tire construction defined by Smith is used in an automobile tire and thus is necessarily mounted on a rim (defines a wheel assembly). With specific regard to claims 31-34, the claims do not further define the structure of the claimed tire article or wheel assembly- the claims are directed to the method of selecting and matching the color of the tire rubber to an additional tire component.

Regarding claim 36, it appears that this claim should be dependent from claim 35 since it further defines “said chemical composition” which not mentioned in claim 34. As previously mentioned, the entire depth of the tire of Smith is formed of a colored rubber composition.

With respect to claim 39, the tire of Smith contains a dye, pigment, or additional coloring agent (Column 3, Lines 20-30).

Regarding claims 40-42, it is initially noted that the claim appears to be dependent from claim 39 rather than claim 38 (claim 38 does not discuss coloring agent). Smith suggests that the desired color can be affected by including pigments, dyes, or additional coloring agents, including optical agents.

3. Claims 1-5, 7-11, 13-16, 20-24, 27-34, 43, and 45 are rejected under 35 U.S.C. 102(e) as being anticipated by Petersen (US 6,499,422). Petersen discloses a tire construction in which the tread and/or sidewalls are formed of a colored region, such that the entire outer surface can be a colored surface.

With respect to claim 7, the outer surface of Peterson is a mutli-colored surface (Column 1, Lines 30-40).

Regarding claim 8, Petersen suggests that the tread and/or sidewalls contain the aforementioned colored pattern. In the instances where both surfaces are not colored, one of the tread or sidewall would be black.

As to claim 9, Petersen suggests a plurality of color patterns (non-black) in the tread and/or sidewall (which includes white).

With respect to claims 10 and 11, the visual pattern, which is colored, is best depicted in Figure 3.

Regarding claims 13-16, Petersen suggests that an ornamental design or pattern can be included on the tire outer surface (Column 3, Lines 15-20).

With respect to claim 20, the surface of Petersen has the same color throughout a lifetime of the tire.

Regarding claim 21, the surface of Petersen is designed to change color over time (e.g. with the change of speed).

As to claims 22 and 23, the color of the tire surface changes with increasing vehicle speed and thus increasing pressure. The increase in contact pressure also results in increased tire wear and thus the change of color is a function of the wire wear.

Regarding claim 24, the change of color is reversible (first color at low speeds and a second color at high speeds).

With respect to claim 27, the sidewall surface of Petersen can have the same color as the tread surface.

Regarding claim 28, since each of the tread and/or sidewall are formed of multi-colored surfaces, a portion of the tread surface will have a different color than a portion of the sidewall surface.

Regarding claim 29, adjacent surface regions of Petersen have different colors.

With respect to claim 30, Figure 7 of Petersen illustrates the tire mounted on a rim (defines wheel assembly).

As to claims 31-34, the tire construction defined by Petersen is used in a tire (Figure 7) and thus is necessarily mounted on a rim (defines a wheel assembly). With specific regard to claims 31-34, the claims do not further define the structure of the claimed tire article or wheel assembly- the claims are directed to the method of selecting and matching the color of the tire rubber to an additional tire component.

Regarding claims 43 and 45, the tire of Petersen changes color in response to an increase in vehicle speed (Column 3, Lines 30-40). It is noted that an increase in vehicle speed is accompanied by an increase in pressure and thus, the color of the tire does change in response to increase in pressure.

4. Claims 1-4, 6-9, 21, 22, 25, 28-35, 39, and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Creasey (US 3,814,160). As best depicted in Figure 1, Creasey is directed to a tire construction in which the outer-tread layer or the under-tread layer can be colored, such that the reference is directed to an embodiment in which the outer tread surface can be colored (e.g. yellow) (Column 2, Lines 1-20).

Regarding claim 6, during normal running and wear, the outer surface is a single colored surface.

With respect to claims 7 and 9, during uneven wear, the tire surface is formed of multiple colors. In particular, the color of the outer tread surface is exposed and the color of the under tread layer is exposed in only the regions where tread wear (uneven) is experienced. Furthermore, Creasey suggests that the colored outer tire surface can be white.

Regarding claim 8, the tire sidewall of Creasey is formed of the conventional black tire rubber composition.

As to claims 21, 22, and 25, the colored surface of Creasey changes with time (the under tread layer becomes exposed as a result of wear). In this instance, the change of color is not reversible.

With respect to claim 28, the outer sidewall surface is black while the outer tread surface is lightly colored as described above.

As to claim 29, the outer tread surface of Creasey will be mutli-colored as a result of uneven tread wear.

Regarding claims 30-34, the tire construction defined by Creasey is used in an automobile tire and thus is necessarily mounted on a rim (defines a wheel assembly). With specific regard to claims 31-34, the claims do not further define the structure of the claimed tire article or wheel assembly- the claims are directed to the method of selecting and matching the color of the tire rubber to an additional tire component.

With respect to claim 35, the outer tread surface of Creasey has a substantially uniform colored surface.

As to claim 39, Creasey describes the inclusion of a suitable pigment to affect the desired color (Column 2, Lines 1-20).

Regarding claim 43, the color of the outer tread surface of Creasey is affected by an increase in pressure- the higher the pressure, the more the tread will wear and the quicker the color of the under-tread layer will be exposed.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 12-14, 17-19, 37, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith as applied in Paragraph 2 above and further in view of Firomeno (JP 2000296703). As previously stated, Smith discloses the manufacture of a colored tire in which the entire depth of the tire is formed of a colored rubber composition. While the reference fails to expressly describe the presence of lettering/symbols, it is extremely well known in the tire industry that tire information (brand name, tire dimensions) and additional appliqués are conventionally displayed on tire sidewalls. For example, Firomeno describes a tire construction in which raised lettering is arranged on the tire sidewall, it being further noted that the rubber composition of said lettering is colored. Thus, the reference recognizes the known use of colored lettering/symbols in the tire industry and as such, one of ordinary skill in the

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art at the time of the invention would have found it obvious to incorporate a design on the sidewalls of Smith.

Regarding claims 18 and 19, as stated above, appliqués, including those containing pin stripes, in general are extremely well known in the tire industry. One of ordinary skill in the art at the time of the invention would have found it obvious to include a pin stripe (raised or unraised) on the sidewall surface of Smith depending on the desired aesthetic effect.

With respect to claims 37 and 38, the inclusion of indicia and appliqués on the sidewalls forms a “non uniform” colored surface. In this same regard, the inclusion of indicia or appliqués results in a patterned tire outer surface.

7. Claims 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith as applied in Paragraph 2 above. In describing the tire construction, Smith suggests a wide variety of dyes, pigments, and coloring agents. While Smith fails to expressly relate the color of the tire rubber composition to the color of additional tire components, one of ordinary skill in the art would have found it obvious to form the tire rubber composition with a color that matches that associated with the wheel, vehicle, and/or additional tire components as desired. In particular, the selection of the color of the tire rubber is dependent on the desired aesthetic characteristic. For example, one of ordinary skill in the art would have found it obvious to select a red rubber composition if the vehicle is red if such an aesthetic characteristic is desired. Lastly, it is noted that one of ordinary skill in the art at the time of the invention would have recognized the tire of Smith to be mounted on a rim and thus define a wheel assembly.

8. Claims 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith as applied in Paragraph 2 above and further in view of McDonald (US 4,317,479). As mentioned above, Smith discloses a tire construction in which the outer tire surface is completely formed of a desired color, for example red or blue. In describing the colored surface, Smith suggests that a variety of materials can be used to impart the desired color, for example colored dyes/pigments, optical pigments, and temperature sensitive (thermochromic) pigments. In the use of thermochromic materials, the color of the tire changes in response to an increase or decrease in temperature. While Smith fails to expressly teach the use of pressure sensitive materials, one of ordinary skill in the art at the time of the invention would have found it obvious to include such a material (pressure sensitive) in the tire of Smith since it is very important to monitor the pressure of a tire during inflation and/or running and furthermore, such pressure sensitive coloring materials are known, as shown for example by McDonald (Column 7, Lines 25-41). It is noted that McDonald, which is similarly directed to a tire construction, describes the use of both temperature sensitive and pressure sensitive coloring materials, suggesting that pressure sensitive coloring materials and heat sensitive coloring materials are recognized as alternatives in the tire industry. Lastly, one of ordinary skill in the art at the time of the invention would have recognized that pressure increases with increased vehicle speed, such that the tire would change color upon an increase in vehicle speed.

9. Claims 12-14 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petersen as applied Paragraph 3 above and further in view of

Firomeno (JP 2000296703). As previously stated, Petersen discloses the manufacture of a tire in which the outer sidewall and/or tread surface is colored. While the reference fails to expressly describe the presence of lettering/symbols, it is extremely well known in the tire industry that tire information (brand name, tire dimensions) and additional appliqués are conventionally displayed on tire sidewalls. For example, Firomeno describes a tire construction in which raised lettering is arranged on the tire sidewall, it being further noted that said lettering is colored. Thus, the reference recognizes the known use of colored lettering/symbols in the tire industry and as such, one of ordinary skill in the art at the time of the invention would have found it obvious to incorporate a design on the sidewalls of Smith.

Regarding claims 18 and 19, as stated above, appliqués, including those containing pin stripes, in general are extremely well known in the tire industry. One of ordinary skill in the art at the time of the invention would have found it obvious to include a pin stripe (raised or unraised) on the sidewall surface of Petersen depending on the desired aesthetic effect.

10. Claims 10-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Creasey as applied in Paragraph 4 above and further in view of Firomeno (JP 2000296703). As previously stated, Creasey discloses the manufacture of a colored tire in which the tread outer layer (surface contacting) can be formed of a colored rubber composition. While the reference fails to expressly describe the presence of lettering/symbols, it is extremely well known in the tire industry that tire information (brand name, tire dimensions) and additional appliqués are conventionally displayed on

tire sidewalls. For example, Firomeno describes a tire construction in which raised lettering is arranged on the tire sidewall, it being further noted that the rubber composition of said lettering is colored. Thus, the reference recognizes the known use of colored lettering/symbols in the tire industry and as such, one of ordinary skill in the art at the time of the invention would have found it obvious to incorporate a design on the sidewalls of Smith. It is further noted that non-colored lettering is also extremely well known and conventional in the tire industry.

Regarding claims 18 and 19, as stated above, appliqués, including those containing pin stripes, in general are extremely well known in the tire industry. One of ordinary skill in the art at the time of the invention would have found it obvious to include a pin stripe (raised or unraised) on the sidewall surface of Creasey depending on the desired aesthetic effect.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Vasseur (US 6,344,506), Kawaguchi (JP 62-068101), Rogal (DE 19613801), Finck (US 6,474,382), Oberster (US 4,987,192), and Zanzig (US 6,561,243) are all concerned with forming a tire component from a colored rubber composition.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R Fischer** whose telephone number is **(703) 605-4397**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (703) 308-3853. The fax phone

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number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Justin Fischer
Justin Fischer

November 26, 2003

J H Aftergut
JEFF H. AFTERGUT
PRIMARY EXAMINER
GROUP 1300